Company Name:	Duke Energy Carolinas, LLC – Catawba Nuclear Station	**Permit Writer:**	Sheila Watts
Permit Number:	CM-2440-0070	**Date:**	**DRAFT**

DATE APPLICATION RECEIVED: March 13, 2017

DATE OF LAST INSPECTION: April 20, 2017. There were no violations of permit requirements or regulations that were observed during the comprehensive inspection.

FACILITY DESCRIPTION The facility generates electricity from nuclear fuels. The sources at this facility consist of several fuel burning sources including generators and compressors, a coating and blasting operation, a carpenter shop, and supporting auxiliary equipment.

PROJECT DESCRIPTION The facility is requesting a conditional major operating permit renewal. The facility has requested the addition of two existing cooling towers as permitted sources and for previously permitted coating booths, sandblaster, carpenter shop, portable generators, and portable water pumps to be considered exempt sources. The existing cooling towers have been on site since the facility's original construction and were previously considered exempt from air permitting. The facility requests their conditional major operating permit be on a 10-year renewal cycle.

CHANGES SINCE LAST OP ISSUANCE The last operating permit issued to the facility was a conditional major operating permit issued April 9, 2012. On July 5, 2012, the facility requested an exemption from construction permitting for two (2) emergency 400 kW Hale Pumps and three (3) emergency 375 Hp (87kW) Sullair Air Compressors. The Department granted the exemption request and issued an exemption letter on July 9, 2012. The exemption resulted in no changes to the April 9, 2012 issued conditional major operating permit.

Based on the information provided by the facility (March 13, 2017 renewal application, e-mails dated January 31, 2018, February 12, 2018, and February 21, 2018), the Department has deemed the following facility sources as permitted or exempt:

Facility Source	Permitted or Exempt Source
Coating Booths	Exempt
Sandblaster	Exempt
Carpenter Shop	Exempt
Generators, Compressors, and Water Pumps	Exempt
Two Existing Cooling Towers	Permitted

The cooling towers do not meet the exemption criteria per S.C. Regulation 61-62.1, Section II (B)(h) and are therefore listed as permitted sources. The previously permitted coating booths, sandblaster, carpenter shop, and generators, compressors, and water pumps are now considered exempt sources due to uncontrolled potential emissions meeting the exemption criteria per S.C. Regulation 61-62.1, Section II (B)(h). A 10/25 limit on HAP emissions and a VOC limitation were put in place for the coating booths. Due to the operation of the coating booths being deemed exempt, the HAP and VOC limits are being removed. The coating booths fall under the Department's Air Permitting Exemptions List (December 2016) Section A (13) - Routine housekeeping or plant upkeep activities such as painting, roofing, paving, including all associated preparation.

SOURCE TEST REQUIREMENTS No source testing is being required at this time. The facility will have inspections and record keeping in place to demonstrate compliance with permit limits.

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EMISSIONS

UNCONTROLLED POTENTIAL EMISSIONS				
Equipment ID/Description	**Pollutant**	**lb/hr**	**TPY**	**Method for Estimating Emissions**
CT-1/Cooling Tower	PM	5.55	24.31	Emissions are based on water circulation rate (facility data), % drift (vendor data), TDS (derived from facility conductivity data) of circulated water and weight % of particle size (Canadian government reference, *Wet Cooling Tower PM Emissions: Guide to Reporting 4/2014*). One cooling tower unit has 3 cells. Used AP-42, 5th Edition, Vol. I, Chapter 13: Miscellaneous Sources, Section 13.4, Wet Cooling Towers, (1/95) Water circulation rate, one unit = 640,000 gpm; Total liquid drift = 0.005%; 3.5 cycles of concentration in the cooling tower; 3 year max. TDS of Circulated Water = 347 ppm; Weight % of particle size = 100 for PM PM_{10} is 66.4% of PM and $PM_{2.5}$ is 1.9% of PM
	PM_{10}	3.69	16.14	
	$PM_{2.5}$	0.11	0.46	
CT-2/Cooling Tower	PM	5.55	24.31	Emissions are based on water circulation rate (facility data), % drift (vendor data), TDS (derived from facility conductivity data) of circulated water and weight % of particle size (Canadian government reference, *Wet Cooling Tower PM Emissions: Guide to Reporting 4/2014*). One cooling tower unit has 3 cells. Used AP-42, 5th Edition, Vol. I, Chapter 13: Miscellaneous Sources, Section 13.4, Wet Cooling Towers, (1/95) Water circulation rate, one unit = 640,000 gpm; Total liquid drift = 0.005%; 3.5 cycles of concentration in the cooling tower; 3 year max. TDS of Circulated Water = 347 ppm; Weight % of particle size = 100 for PM PM_{10} is 66.4% of PM and $PM_{2.5}$ is 1.9% of PM
	PM_{10}	3.69	16.14	
	$PM_{2.5}$	0.11	0.46	
PB1/Paint Booth 1 (*exempt*)	PM	0.5	2.19	Assumed that $PM_{2.5}$=PM_{10}=PM Hours of operation = 8760 hours/year Emissions are based on facility estimates
	PM_{10}	0.5	2.19	
	$PM_{2.5}$	0.5	2.19	
	VOC	34.25	4.675	Emissions are based on facility estimates and looking at past 11 years of VOC and HAP emissions. Hours of operation = 273 hours/year (45 min./day, 7 days a week, 52 weeks a year)
	Xylene (HAP, TAP, & VOC)	10.9	1.49	
	Ethyl Benzene (HAP, TAP, & VOC)	1.95	0.27	
	Toluene (HAP, TAP, & VOC)	1.95	0.27	

	MEK (TAP & VOC)	4.5	0.61	
	MIBK (HAP, TAP, & VOC)	2.0	0.27	
PB2/Paint Booth 2 (*exempt*)	PM	0.5	2.19	Assumed that $PM_{2.5}$=PM_{10}=PM Hours of operation = 8760 hours/year Emissions are based on facility estimates
	PM_{10}	0.5	2.19	
	$PM_{2.5}$	0.5	2.19	
	VOC	34.25	4.675	Emissions are based on facility estimates and looking at past 11 years of VOC and HAP emissions. Hours of operation = 273 hours/year (45 min./day, 7 days a week, 52 weeks a year)
	Xylene (HAP, TAP, & VOC)	10.9	1.49	
	Ethyl Benzene (HAP, TAP, & VOC)	1.95	0.27	
	Toluene (HAP, TAP, & VOC)	1.95	0.27	
	MEK (TAP & VOC)	4.5	0.61	
	MIBK (HAP, TAP, & VOC)	2.0	0.27	
02/Sandblasting (*exempt*)	PM	1.0	1.46	Assumed that $PM_{2.5}$=PM_{10}=PM Hours of operation = 2912 hours/year (8 hours/day, 7 days a week, 52 weeks a year) Emissions are based on facility estimates
	PM_{10}	1.0	1.46	
	$PM_{2.5}$	1.0	1.46	
03/Carpenter Shop (*exempt*)	PM	34.0	3.4	Facility estimates (34 lb/hr from cyclone to baghouse) Assumed $PM_{2.5}$ = PM_{10} and PM_{10} is 40% of PM based on EPA-450/4-90-003, AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants, pg 143, Sawmill Operations; sawing: cyclone exhaust, March 1990 Actual hours of operation are 100 hours/year therefore facility has estimated potential operational hours to be 200 hours/year.
	PM_{10}	13.6	1.36	
	$PM_{2.5}$	13.6	1.36	
12/1300 CFM Utility Air Compressor (*portable, exempt*)	PM	0.37	1.63	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 8760 hours/year
	PM_{10}	0.37	1.63	
	$PM_{2.5}$	0.37	1.63	
	SO_2	0.35	1.52	
	NO_X	5.29	23.18	
	CO	1.14	4.99	
	VOC	0.43	1.89	
	GHG (CO_2e)	----	860	
13/900 CFM Utility Air Compressor (*portable, exempt*)	PM	0.24	1.03	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1, 10/96 Update.
	PM_{10}	0.24	1.03	
	$PM_{2.5}$	0.24	1.03	

	SO_2	0.22	0.97	GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 8760 hours/year
	NO_X	3.35	14.68	
	CO	0.72	3.16	
	VOC	0.27	1.20	
	GHG (CO_2e)	----	545	
14/83 kW Onan Diesel Generator (*portable, exempt*)	PM	0.09	0.38	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 8760 hours/year
	PM_{10}	0.09	0.38	
	$PM_{2.5}$	0.09	0.38	
	SO_2	0.08	0.36	
	NO_X	1.23	5.41	
	CO	0.27	1.17	
	VOC	0.10	0.44	
	GHG (CO_2e)	----	201	
15/100 kW Winco Diesel Generator (*portable, exempt*)	PM	0.11	0.46	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 8760 hours/year
	PM_{10}	0.11	0.46	
	$PM_{2.5}$	0.11	0.46	
	SO_2	0.10	0.43	
	NO_X	1.50	6.57	
	CO	0.32	1.41	
	VOC	0.12	0.54	
	GHG (CO_2e)	----	244	
21/82 kW Deutz F6L912 6" Water Pump (*portable, exempt*)	PM	0.09	0.38	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 8760 hours/year
	PM_{10}	0.09	0.38	
	$PM_{2.5}$	0.09	0.38	
	SO_2	0.08	0.36	
	NO_X	1.23	5.41	
	CO	0.27	1.17	
	VOC	0.10	0.44	
	GHG (CO_2e)	----	201	
22/82 kW Deutz F6L912 6" Water Pump (*portable, exempt*)	PM	0.09	0.38	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 8760 hours/year
	PM_{10}	0.09	0.38	
	$PM_{2.5}$	0.09	0.38	
	SO_2	0.08	0.36	
	NO_X	1.23	5.41	
	CO	0.27	1.17	
	VOC	0.10	0.44	
	GHG (CO_2e)	----	201	
EX-0004/2.39 x 10^6 Btu/hr, 700 kW Emergency Safe Shutdown Diesel Generator (*exempt*)	PM	0.24	0.06	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, Table 3.4-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 500 hours/year
	PM_{10}	0.20	0.05	
	$PM_{2.5}$	0.19	0.05	
	SO_2	2.41	0.60	
	NO_X	7.65	1.91	
	CO	2.03	0.51	
	VOC	0.20	0.05	
	GHG (CO_2e)	----	97.75	
	PM	2.39	0.60	Emission factors are from AP-42, 5th
	PM_{10}	1.96	0.49	

EX-0005/23.89 x 10^6 Btu/hr Emergency Diesel Generator 1A (*exempt*)	$PM_{2.5}$	1.91	0.48	Edition, Vol. I, Chapter 3, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, Table 3.4-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 500 hours/year
	SO_2	24.13	6.03	
	NO_X	76.45	19.11	
	CO	20.31	5.08	
	VOC	2.00	0.50	
	GHG (CO_2e)	----	977	
EX-0006/23.89 x 10^6 Btu/hr Emergency Diesel Generator 1B (*exempt*)	PM	2.39	0.60	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, Table 3.4-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 500 hours/year
	PM_{10}	1.96	0.49	
	$PM_{2.5}$	1.91	0.48	
	SO_2	24.13	6.03	
	NO_X	76.45	19.11	
	CO	20.31	5.08	
	VOC	2.00	0.50	
	GHG (CO_2e)	----	977	
EX-0007/23.89 x 10^6 Btu/hr Emergency Diesel Generator 2A (*exempt*)	PM	2.39	0.60	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, Table 3.4-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 500 hours/year
	PM_{10}	1.96	0.49	
	$PM_{2.5}$	1.91	0.48	
	SO_2	24.13	6.03	
	NO_X	76.45	19.11	
	CO	20.31	5.08	
	VOC	2.00	0.50	
	GHG (CO_2e)	----	977	
EX-0008/23.89 x 10^6 Btu/hr Emergency Diesel Generator 2B (*exempt*)	PM	2.39	0.60	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, Table 3.4-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 500 hours/year
	PM_{10}	1.96	0.49	
	$PM_{2.5}$	1.91	0.48	
	SO_2	24.13	6.03	
	NO_X	76.45	19.11	
	CO	20.31	5.08	
	VOC	2.00	0.50	
	GHG (CO_2e)	----	977	
EX-0009/150 kW Communications Emergency Diesel Generator (*exempt*)	PM	0.16	0.04	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 500 hours/year
	PM_{10}	0.16	0.04	
	$PM_{2.5}$	0.16	0.04	
	SO_2	0.15	0.04	
	NO_X	2.25	0.56	
	CO	0.48	0.12	
	VOC	0.18	0.045	
	GHG (CO_2e)	----	20.75	
EX-0035/260 kW Emergency Hydraulic Generator (*portable*, *exempt*)	PM	0.28	0.07	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 500 hours/year
	PM_{10}	0.28	0.07	
	$PM_{2.5}$	0.28	0.07	
	SO_2	0.26	0.065	
	NO_X	3.92	0.98	
	CO	0.85	0.21	
	VOC	0.32	0.08	
	GHG (CO_2e)	----	36.5	
	PM	0.17	0.04	

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EX-0036/157.5 kW Emergency Aquatic Generator (*exempt*)	PM_{10}	0.17	0.04	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 500 hours/year
	$PM_{2.5}$	0.17	0.04	
	SO_2	0.16	0.04	
	NO_X	2.38	0.60	
	CO	0.51	0.13	
	VOC	0.19	0.05	
	GHG (CO_2e)	----	22	
EX-0037/Three (3) 1600 CFM Emergency VI Compressor (*exempt*)	PM	1.26	0.315	Emission factors are from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 500 hours/year, each
	PM_{10}	1.26	0.315	
	$PM_{2.5}$	1.26	0.315	
	SO_2	1.20	0.30	
	NO_X	18.12	4.53	
	CO	3.90	0.975	
	VOC	1.47	0.36	
	GHG (CO_2e)	----	168	
23/5,136 BHP (3500 kW) Caterpillar C175-20 Emergency Diesel Generator (*exempt*)	PM	1.544	0.386	Emissions for PM, NO_X, CO, and VOC were obtained from manufacturer specifications. Assumed that $PM_{2.5}$=PM_{10}=PM The SO_2 emission factor is from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, Table 3.4-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 500 hours/year
	PM_{10}	1.544	0.386	
	$PM_{2.5}$	1.544	0.386	
	SO_2	37.97	9.49	
	NO_X	47.9	11.975	
	CO	27.0	6.752	
	VOC	1.48	0.37	
	GHG (CO_2e)	----	1,344	
24/5,136 BHP (3500 kW) Caterpillar C175-20 Emergency Diesel Generator (*exempt*)	PM	1.544	0.386	Emissions for PM, NO_X, CO, and VOC were obtained from manufacturer specifications. Assumed that $PM_{2.5}$=PM_{10}=PM The SO_2 emission factor is from AP-42, 5th Edition, Vol. I, Chapter 3, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, Table 3.4-1, 10/96 Update. GHG emissions (short tons) were estimated using 40 CFR 98, Subpart C, Tables C-1 and C-2. Hours of operation = 500 hours/year
	PM_{10}	1.544	0.386	
	$PM_{2.5}$	1.544	0.386	
	SO_2	37.97	9.49	
	NO_X	47.9	11.975	
	CO	27.0	6.752	
	VOC	1.48	0.37	
	GHG (CO_2e)	----	1,344	

CONTROLLED POTENTIAL EMISSIONS

Equipment ID/Description	Pollutant	lb/hr	TPY	Method for Estimating Emissions
PB1/Paint Booth 1 (*exempt*)	PM	0.05	0.219	PM, PM_{10}, and $PM_{2.5}$ controlled using Flanders Arrestor Pad, Series 331Y - Filters with approximate capture efficiency of 100% and control efficiency of 90%
	PM_{10}	0.05	0.219	
	$PM_{2.5}$	0.05	0.219	
PB2/Paint Booth 2 (*exempt*)	PM	0.05	0.219	PM, PM_{10}, and $PM_{2.5}$ controlled using Flanders Arrestor Pad, Series 331Y - Filters with approximate capture efficiency of 100% and control efficiency of 90%
	PM_{10}	0.05	0.219	
	$PM_{2.5}$	0.05	0.219	

02/Sandblasting (*exempt*)	PM	0.0001	0.0001	Hoffman Model T4-48 Baghouse with approximate capture efficiency of 100% and control efficiency of 99.99%
	PM_{10}	0.0001	0.0001	
	$PM_{2.5}$	0.0001	0.0001	
03/Carpenter Shop (*exempt*)	PM	0.51	0.051	Dayton Model 3AA26 Central Dust Collector with approximate capture efficiency of 100% and control efficiency of 98.5%
	PM_{10}	0.204	0.020	
	$PM_{2.5}$	0.204	0.020	

FACILITY WIDE EMISSIONS (includes emissions from exempt combustion sources)		
Pollutant	**Uncontrolled Emissions**	**Controlled/Limited Emissions**
	TPY	**TPY**
PM	65.8	57.1
PM_{10}	47.0	40.2
$PM_{2.5}$	15.6	8.8
SO_2	48.1	48.1
NO_X	169.6	Limited to < 100.0 tpy
CO	48.8	48.8
VOC	17.6	17.6
GHG (CO_2e)	9,193	9,193
Single Greatest HAP (Xylene)	3.0	3.0
Total HAPs	4.6	4.6

The table below contains a list of sources which are considered exempt from the requirements to obtain a construction permit pursuant to South Carolina Regulation 61-62.1, Section II(B). Sources listed below are not exempt from any otherwise applicable state or federal requirements including, but not limited to, opacity standards, ambient air quality standards, and air toxic standards.

EXEMPT SOURCES				
Equipment ID	**Source Description[1]**	**Installation Date**	**Basis**	**NESHAP and/or NSPS[2] (Manufacture Date)**
EX-0004	2.39 x 10^6 Btu/hr, 700 kW Emergency Safe Shutdown Diesel Generator	1980	SC Reg. 61-62.1, Section II(B)(2)(f)(ii)	NESHAP ZZZZ (1980)
EX-0005	23.89 x 10^6 Btu/hr Emergency Diesel Generator 1A	1980	SC Reg. 61-62.1, Section II(B)(2)(f)(ii)	NESHAP ZZZZ (1980)
EX-0006	23.89 x 10^6 Btu/hr Emergency Diesel Generator 1B	1980	SC Reg. 61-62.1, Section II(B)(2)(f)(ii)	NESHAP ZZZZ (1980)
EX-0007	23.89 x 10^6 Btu/hr Emergency Diesel Generator 2A	1980	SC Reg. 61-62.1, Section II(B)(2)(f)(ii)	NESHAP ZZZZ (1980)
EX-0008	23.89 x 10^6 Btu/hr Emergency Diesel Generator 2B	1980	SC Reg. 61-62.1, Section II(B)(2)(f)(ii)	NESHAP ZZZZ (1980)
EX-0009	150 kW Communications Emergency Diesel Generator	1998	SC Reg. 61-62.1, Section II(B)(2)(f)(i)	NESHAP ZZZZ (1998)

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EXEMPT SOURCES				
Equipment ID	**Source Description[1]**	**Installation Date**	**Basis**	**NESHAP and/or NSPS[2] (Manufacture Date)**
EX-0023	Four (4) Unit 1 underground 45,000 gallon diesel fuel tanks (8/78)	1978	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
EX-0024	Four (4) Unit 2 underground 45,000 gallon diesel fuel tanks (8/79)	1979	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
EX-0025	12,000 gallon underground gasoline tank	1993	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
EX-0026	12,000 gallon underground diesel fuel tank	1993	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
EX-0027	2,500 gallon used oil tank	1993	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
EX-0028	1,000 gallon hydraulic oil tank	1993	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
EX-0029	1,000 gallon ATF tank	1993	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
EX-0030	600 gallon antifreeze tank	1993	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
EX-0031	2,500 gallon motor oil storage tank	1993	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
EX-0032	8,000 gallon used lube oil storage tank	1978	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
EX-0033	8,000 gallon clean lube oil storage tank	1978	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
EX-0034	6,213 gallon Safe Shutdown Facility Diesel Fuel Tank	1980	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
EX-0035	260 kW Emergency Hydraulic Generator (*portable*)	2007	BAQ Permitting Exemption List dated December 2016 Section B (2)(ii)	NESHAP ZZZZ and NSPS IIII (2007)
EX-0036	157.5 kW Emergency Aquatic Generator	2010	SC Reg. 61-62.1, Section II(B)(2)(f)(ii)	NESHAP ZZZZ and NSPS IIII (2010)
EX-0037	Three (3), 1600 CFM Emergency VI Compressor	2010	SC Reg. 61-62.1, Section II(B)(2)(f)(ii)	NESHAP ZZZZ and NSPS IIII (one @ 2008 and two @ 2010)
PB1	Paint Booth 1	1988	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
PB2	Paint Booth 2	1988	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
02	Sandblaster Booth	1988	SC Reg. 61-62.1, Section II(B)(2)(h)	N/A
12	1300 CFM Utility Air Compressor (*portable*)	1997	BAQ Permitting Exemption List dated December 2016 Section B (2)(ii)	N/A
13	900 CFM Utility Air Compressor (*portable*)	1997	BAQ Permitting Exemption List dated December 2016 Section B (2)(ii)	N/A

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EXEMPT SOURCES				
Equipment ID	**Source Description[1]**	**Installation Date**	**Basis**	**NESHAP and/or NSPS[2] (Manufacture Date)**
14	83 kW Onan Diesel Generator (*portable*)	1997	BAQ Permitting Exemption List dated December 2016 Section B (2)(ii)	N/A
15	100 kW Winco Diesel Generator (*portable*)	1996	BAQ Permitting Exemption List dated December 2016 Section B (2)(ii)	N/A
21	82 kW Duetz F6L912 6" Water Pump (*portable*)	1997	BAQ Permitting Exemption List dated December 2016 Section B (2)(ii)	N/A
22	82 kW Duetz F6L912 6" Water Pump (*portable*)	1996	BAQ Permitting Exemption List dated December 2016 Section B (2)(ii)	N/A
23	5,136 BHP (3500 kW) Caterpillar C175-20 Emergency Diesel Generator	1/2018	SC Reg. 61-62.1, Section II(B)(2)(f)(ii)	NESHAP ZZZZ and NSPS IIII (2016)
24	5,136 BHP (3500 kW) Caterpillar C175-20 Emergency Diesel Generator	1/2018	SC Reg. 61-62.1, Section II(B)(2)(f)(ii)	NESHAP ZZZZ and NSPS IIII (2016)

1. Sources listed in the above Exempt Sources table as "portable" are included for inspection purposes only and are not subject to regulation.
2. N/A = Not Applicable

OPERATING PERMIT STATUS

This facility currently operates under a Conditional Major Operating Permit; issued on April 9, 2012; effective on July 1, 2012; and expired on June 30, 2017.

REGULATORY APPLICABILITY REVIEW	
Regulations	**Comments/Periodic Monitoring Requirements**
Section II.E – Synthetic Minor	Not Applicable. The facility previously had synthetic minor limitations, however the synthetic minor limitation is no longer necessary due to the coating booth operation being deemed exempt.
Section II.G - Conditional Major	Applicable. The facility has a Federally enforceable permit to limit their potential to emit to less than major source thresholds for NOx, set forth in the facility's conditional major issued July 29, 1999 (CM-2440-0070). The facility's existing conditional major operating permit has a limit on their potential to emit to less than major source thresholds for NOx (from exempt sources). Previously, the facility was also limited to less than major source thresholds for VOC and HAP. These limits are being removed due to the coating booth operation being deemed an exempt source and the facility no longer being close to major source thresholds for VOC and HAP.

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REGULATORY APPLICABILITY REVIEW	
Regulations	**Comments/Periodic Monitoring Requirements**
Standard No. 1	Not Applicable. All fuel burning sources at this facility are direct fired.
Standard No. 3 (state only)	Not Applicable. This process does not contain waste combustion or reduction sources.
Standard No. 4	Applicable. The cooling towers have limits imposed by this standard. For the cooling towers, the materials introduced into the source operation are not an integral part of the product, therefore there is no determination of process weight rate and no established PM allowable emission rate. See SC Regulation 61-62.5, Standard No. 4 Table below for applicable sources and monitoring requirements.
Standard No. 5	Not Applicable. The affected source (coating booths) was not in existence in 1979 or 1980.
Standard No. 5.2	Not Applicable. Sources were installed before 06/25/2004 and the burner assemblies have not been replaced.
Standard No. 7	Not Applicable. The facility's PTE for any pollutant is less than 250 tpy; therefore the facility is not major for PSD. Additionally, the facility no longer contains emission sources that are subject to any Synthetic Minor Emission Limitations.
61-62.6	Not Applicable. The facility does not have fugitive PM (Dust) emissions.
40 CFR 60 and 61-62.60	Applicable. The facility has exempt sources that are subject to NSPS 40 CFR 60 Subpart A and Subpart IIII and must comply with all applicable requirements. The storage tanks located at the facility, listed as exempt equipment, are not subject to NSPS 40 CFR 60 Subpart Kb because they do not have the applicable design capacity and/or are storing a liquid with a maximum vapor pressure less than 3.5 kPa.
40 CFR 61 and 61-62.61	Not Applicable. None of the processes, which are regulated by the regulation, apply.
40 CFR 63 and 61-62.63	Applicable. The facility has exempt sources that are subject to the area source provisions of 40 CFR 63, Subpart A and Subpart ZZZZ and must comply with all applicable requirements.
61-62.68	Not Applicable. The facility does not store or use chemicals subject to 112(r) above the threshold quantities.
40 CFR 64 (CAM)	Not Applicable. Not a TV facility.

AMBIENT AIR STANDARDS REVIEW	
Regulations	**Comments/Periodic Monitoring Requirements**
Standard No. 2	The facility has demonstrated compliance through modeling; see modeling summary dated June 14, 2018.
Standard No. 7.c	The facility has demonstrated compliance through modeling for the PSD Class II increments for York County; see modeling summary dated June 14, 2018.
Standard No. 8 (state only)	The facility has demonstrated compliance through modeling for all TAPs; see modeling summary dated June 14, 2018.

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SC Regulation 61-62.5, Standard No. 4						
ID	**Opacity**	**PM Allowable lb/hr**	**Process Weight Rate (tons/hr)**	**Uncontrolled PM Emissions (lb/hr)**	**Controlled PM Emissions (lb/hr)**	**Monitoring**
05	20%	See note 1	See note 1	11.1 (total)	N/A	Semiannual visual inspections

Note 1: There is no process weight rate associated with the cooling towers.

PUBLIC NOTICE
This Conditional Major Permit will undergo a 30-day public notice period in accordance with SC Regulation 61-62.1, Section II.N. The comment period was open from June 25, 2018 to July 24, 2018 and was placed on the BAQ website during that time period.

SUMMARY AND CONCLUSIONS
It has been determined that this source, if operated in accordance with the submitted application, will meet all applicable requirements and emission standards.